

AMENDMENTS TO THE CLAIMS

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-25 (cancelled)

26. (Currently Amended) A tool for surgery of a joint, the tool comprising:

a first component ~~mold~~ having a surface for engaging a substantially uncut joint surface, the surface conforming to ~~being a mirror image of~~ the joint surface; and

a block that communicates with the first component ~~mold~~; and

at least one guide in the block, the guide for directing a surgical instrument, wherein the shape and/or position of at least one of the block and the guide is referenced to based, at least in part, ~~on one or more~~ at least one of an anatomical axis and a biomechanical axis ~~axes~~ associated with ~~related to~~ said joint.

27. (Currently Amended) The tool of claim 26 wherein the first component ~~mold~~ and the block are integrally formed.

28. (Currently Amended) The tool of claim 26 wherein the surface of the first component ~~mold~~ has a convex portion.

29. (Currently Amended) The tool of claim 26 wherein the first component ~~mold~~ has at least one guide e positioned below the at least one guide in the block.

30. (Currently Amended) The tool of claim 26 wherein at least one of the first component ~~mold~~ and the block have a plurality of guides therein.

31. (Previously Presented) The tool of claim 30 wherein a first guide of a plurality of guides is configured at an angle to a second guide of a plurality of guides.

32. (Currently Amended) The tool of claim ~~26~~ 30 wherein the first component ~~mold~~ has at least one stabilizer on the surface that engages the joint surface.

33. (Currently Amended) The tool of claim ~~32~~ 70 wherein the stabilizer is selected from the group consisting of pin, peg, post, and nub.

34. (Currently Amended) The tool of claim 26 wherein a surface of the first component ~~mold~~ that communicates with a surface of the block is configured to prevent at least one movement selected from the group consisting of axial, lateral and rotational.

35. (Currently Amended) The tool of claim 34 wherein the surface of the block that engages the first component ~~mold~~ is at least one of convex or concave.

36. (Currently Amended) The tool of claim 34 wherein the surface of the first component ~~mold~~ that engages the block is at least one of convex or concave.

37. (Currently Amended) The tool of claim ~~26~~ 34 wherein the surface of at least one of the first component ~~mold~~ and block has an aperture for receiving at least one of a pin, post and peg located on a surface of the first component ~~mold~~.

38. (Original) The tool of claim 37 wherein the aperture forms a groove providing rotational movement.

39. (Currently Amended) The tool of claim 37 wherein the first component ~~mold~~ is selected from a library of components ~~molds~~.

40. (Cancelled)

41. (Currently Amended) The tool of claim 36 wherein at least one of the first component ~~mold~~ and block has a reaming aperture.

42. (Currently Amended) The tool of claim 26 or 27 ~~36~~ further comprising spacers.

43. (Currently Amended) The tool of claim 36 wherein the block engages the first component ~~mold~~ in a snap fit.

44. (Currently Amended) The tool of claim 26 or 27 ~~36~~ configured to be used in at least one of hip, knee, ankle, shoulder, elbow and wrist.

45. (Cancelled)

46. (Cancelled)

47. (Cancelled)

48. (Currently Amended) A tool for surgery of a joint, the tool formed at least partially in situ, the tool comprising:

a mold formed in situ using at least one of an inflatable hollow device or a retaining device, the mold having a surface for engaging a substantially uncut joint surface, the surface conforming to ~~being a mirror image of~~ the joint surface;

a block that communicates with the mold; and

at least one guide in the block, the guide for directing a surgical instrument, wherein the shape and/or position of at least one of the block and the guide is referenced to based, at least in part, ~~on one or more~~ at least one of an anatomical axis and a biomechanical axis ~~axes associated related~~ to said joint.

49. (Previously Presented) The tool of claim 48 wherein the mold has at least one guide positioned below the at least one guide in the block.

50. (Currently Amended) The tool of claim 48 wherein at least one of the mold and the block have a plurality of guides therein.

51. (Previously Presented) The tool of claim 50 wherein a first guide of a plurality of guides is configured at an angle to a second of a plurality of guides.

52. (Currently Amended) The tool of claim 48 ~~50~~ wherein the mold has at least one stabilizer on the surface that engages the joint surface.

53. (Currently Amended) The tool of claim 52 ~~40~~ wherein the stabilizer is selected from the group consisting of pin, peg, post, and nub.

54. (Original) The tool of claim 48 wherein a surface of the mold that communicates with a surface of the block is configured to prevent at least one movement selected from the group consisting of axial, lateral and rotational.

55. (Original) The tool of claim 54 wherein the surface of the block that engages the mold is at least one of convex or concave.

56. (Original) The tool of claim 54 wherein the surface of the mold that engages the block is at least one of convex or concave.

57. (Currently Amended) The tool of claim 48 ~~54~~ wherein the surface of at least one of the mold and block has an aperture for receiving at least one of a pin, post and peg located on a surface of the mold.

58. (Original) The tool of claim 57 wherein the aperture forms a groove providing rotational movement.

59. (Cancelled)

60. (Original) The tool of claim 48 wherein at least one of the mold and block has a reaming aperture.

61. (Currently Amended) The tool of claim 48 ~~60~~ further comprising spacers.

62. (Currently Amended) The tool of claim 48 wherein the block engages the mold in a snap fit.

63. (Original) The tool of claim 48 configured to be used in at least one of hip, knee, ankle, shoulder, elbow and wrist.

64. (Cancelled)

65. (Cancelled)

66. (Cancelled)

67. (Currently Amended) The tool according to claim 26 or 27, wherein ~~said axes~~ the at least one of an anatomical axis and a biomechanical axis includes an anatomic axis.

68. (Currently Amended) The tool according to claim 26 or 27, wherein ~~said axes~~ the at least one of an anatomical axis and a biomechanical axis includes a biomechanical axis.

69. (Currently Amended) The tool according to claim 26 or 27, wherein the surface has a concave portion.

70. (Currently Amended) The tool according to claim 26 or 27, wherein the surface has a flat portion.

71. (Currently Amended) The tool according to claim 26 or 27, wherein the surface has concave and convex portions.

72. (Currently Amended) The tool according to claim 26 or 27, wherein the joint surface includes portions of at least one of a medial condyle and a lateral condyle.

73. (Currently Amended) The tool according to claim 26 or 27, wherein the joint surface includes portions of at least one of a medial tibial plateau and a lateral tibial plateau.

74. (Currently Amended) The tool according to claim 26 or 27, wherein said joint surface includes cartilage.

75. (Currently Amended) The tool according to claim 26 or 27, wherein said joint surface includes subchondral bone.

76. (Currently Amended) The tool according to claim 26 or 27, wherein the guide is dimensioned to control drill depth.

77. (Currently Amended) The tool according to claim 26 or 27, wherein the guide includes a metal insert.

78. (Currently Amended) The tool according to claim 26, further comprising attachment means for attaching the block to the first component ~~rod~~.

79. (Currently Amended) The tool according to claim 26, further comprising an adjustment mechanism for adjusting the position of the block relative to the first component ~~rod~~.

80. (Previously Presented) The tool according to claim 79, wherein the adjustment mechanism includes at least one of a hinge device, a jack device, and a ratchet device.

81. (Currently Amended) The tool according to claim 48, wherein ~~said axes~~ the at least one of an anatomical axis and a biomechanical axis includes an anatomic axis.

82. (Currently Amended) The tool according to claim 48, wherein ~~said axes~~ the at least one of an anatomical axis and a biomechanical axis includes a biomechanical axis.

83. (Previously Presented) The tool according to claim 48, wherein the surface has a convex portion.

84. (Previously Presented) The tool according to claim 48, wherein the surface has a concave portion.

85. (Previously Presented) The tool according to claim 48, wherein the surface has a flat portion.

86. (Previously Presented) The tool according to claim 48, wherein the surface has concave and convex portions.

87. (Previously Presented) The tool according to claim 48, wherein the joint surface includes portions of at least one of a medial condyle and a lateral condyle.

88. (Previously Presented) The tool according to claim 48, wherein the joint surface includes portions of at least one of a medial tibial plateau and a lateral tibial plateau.

89. (Previously Presented) The tool according to claim 48, wherein said joint surface includes cartilage.

90. (Previously Presented) The tool according to claim 48, wherein said joint surface includes subchondral bone.
91. (Previously Presented) The tool according to claim 48, wherein the guide aperture is dimensioned to control drill depth.
92. (Previously Presented) The tool according to claim 48, wherein the guide aperture includes a metal insert.
93. (Previously Presented) The tool according to claim 48, further comprising attachment means for attaching the block to the mold.
94. (Previously Presented) The tool according to claim 48, further comprising an adjustment mechanism for adjusting the position of the block relative to the mold.
95. (Previously Presented) The tool according to claim 94, wherein the adjustment mechanism includes at least one of a hinge device, a jack device, and a ratchet device.
96. (New) The tool of claim 94, wherein said adjustment mechanism includes adjustment means for optimizing at least one of flexion gap, extension gap, flexion, extension, abduction, adduction, internal rotation, and external rotation.
97. (New) The tool of claim 94, wherein said adjustment mechanism includes adjustment means for optimizing balance of the joint.
98. (New) The tool according to claim 26 or 27, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with the hip.
99. (New) The tool according to claim 26 or 27, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with the ankle.

100. (New) The tool of claim 26 or 27, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with a femoral condyle and/or a femur.

101. (New) The tool of claim 26 or 27, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with a tibial plateau and/or a tibia.

102. (New) The tool of claim 26, wherein the first component is one of a mold and a machined part.

103. (New) The tool of claim 79, wherein said adjustment mechanism includes adjustment means for optimizing at least one of flexion gap, extension gap, flexion, extension, abduction, adduction, internal rotation, and external rotation.

104. (New) The tool of claim 79, wherein said adjustment mechanism includes adjustment means for optimizing balance of the joint.

105. (New) The tool according to claim 48, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with the hip.

106. (New) The tool according to claim 48, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with the ankle.

107. (New) The tool of claim 48, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with a femoral condyle and/or a femur.

108. (New) The tool of claim 48, wherein one or more of the at least one of an anatomical axis or a biomechanical axis is associated with a tibial plateau and/or a tibia.

109. (New) The tool of claim 79, wherein said adjustment mechanism includes adjustment means for optimizing at least one of flexion gap, extension gap, flexion, extension, abduction, adduction, internal rotation, and external rotation.

110. (New) The tool of claim 79, wherein said adjustment mechanism includes adjustment means for optimizing balance of the joint.